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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/648,019	08/25/2000	Kenneth Y. Maxham	23106/77099	4564

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ALCATEL USA
INTELLECTUAL PROPERTY DEPARTMENT
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PLANO, TX 75075

EXAMINER

PAYNE, DAVID C

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



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24578	7590	04/19/2004	EXAMINER	
MCI WORLDCOM INC TECHNOLOGY LAW DEPT 1133 19TH ST, NW WASHINGTON, DC 20036			PAYNE, DAVID C	
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DATE MAILED: 04/19/2004

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Office Action Summary

Application No.

09/648,019

Applicant(s)

MAXHAM, KENNETH Y.

Examiner

David C. Payne

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 4, 6, 7 and 9-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 6, 7, and 9-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections

set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 4, 6, 7, and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Czamocha et al. US 6,504, 630 B1 (Czamocha) in view of Fee US 5,995,256 (Fee) and Nakazato US 6,599,039 B1 (Nakazato).

Regarding claims 1, 6, 7 and 10, Czamocha disclosed

A fiber optic communications network (Figures 1 and 6) that has a means for activating a shutdown input (116, 126 of Figure 1) of an optical amplifier ((111, 121 of Figure 1), (612, 616 of Figure 6)) if the predetermined number of received valid signals is not detected (e.g., col./lines: 5/35-60, 10/20-25).

Czamocha does not disclose,

a transmitter and a receiver connected by an optical transmission line, the receiver having multiple

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output channels for providing signals to terminal devices, each output channel including a demodulator to detect and recover a received valid signal, and a network including at least one optical amplifier having a shutdown input, a system for detecting a disconnect in the optical transmission line comprising:

means connected to each demodulator for sensing the presence of a received valid signal;

means for detecting whether a predetermined number of received valid signals are present at a predetermined number of the multiple demodulators;

Fee disclosed,

a transmitter (520 of Figure 5) and a receiver (540 of Figure 5) connected by an optical transmission line (530 of Figure 5), the receiver (or wavelength adapter as disclosed by applicant) having multiple output channels (542 of Figure 5) for providing signals to terminal devices (e.g., col./line: 5/30-35), each output channel including a demodulator to detect and recover a received valid signal (e.g., col./line: 3/20-25):

it would have been obvious to one of ordinary skill in the art at the time of invention to use the transmitter, receiver and demodulators of Fee in the Czarnocha invention since the aforementioned components are implied in the Czarnocha invention and are well recognized and necessary for transmitting and receiving optical signals.

Nakazato disclosed,

means for detecting whether a predetermined number of received valid signals are present (e.g., col./line: 27/36-41). It would have been obvious to one of ordinary skill in the art at the time of invention to count the number of valid signals to determine a loss of signal in the Czarnocha invention in order to distinguish between an increase/decrease in number of light signals and a simple loss variation in signal level of the transmission path as disclosed by Nakazato (see col./line: 17/30-45).

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Re claims 3 and 9, the modified invention of Czamocha, Fee and Nakazato does not disclose, means for determining a ratio of valid signals to demodulators. However it would have been obvious to one of ordinary skill in the art the time of invention to calculate a ratio of valid signals since Czamocha does disclose performing shutdown if both data and supervisory signal is missing. This constitutes a ratio of 1/1, or 2 signals / 2 demodulators. In other words, it is obvious since the number of valid signals is less than the number of demodulators then a failure has occurred in the system. Furthermore, many WDM systems monitors detect the presence of signals, whether or not a ratio calculated is not patentable over detecting whether one signal has failed since a failure of one signal is a ratio of 1/n.

Re claim 4, the modified invention of Czamocha, Fee and Nakazato disclosed, wherein said means for determining the number of valid signals includes a counter (see Nakazato col./line: 1:60-65) for counting the number of said demodulators in operation.

Re claim 11, the modified invention of Czamocha, Fee and Nakazato disclosed, wherein each of the plurality of receive wavelength adapters output a loss of signal if the received power of the inputted wavelength is lost (see Nakazato col./line: 17/30-45).

Re claims 12 and 13, the modified invention of Czamocha, Fee and Nakazato disclosed, wherein the at least one associated optical amplifier amplifies the received WDM signal (see Czamocha 612, 616 of Figure 6).

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Re claims 14 and 15, the modified invention of Czarnocha, Fee and Nakazato disclosed, wherein the at least one associated optical amplifier is located at the optical node (see Czarnocha 612, 616 of Figure 6).

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (703) 306-0004. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (703) 305-4729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JASON CHAN
SUPERVISOR OF EXAMINER
TECHNOLOGY CENTER 2600

Dcp